

expressed antigens within the groove of MHC class I and class II, plus CD1 molecules. The processed peptides and glycolipids associated with MHC and CD1 molecules, respectively, would stimulate immune responses by binding to the CD3 molecule and the T-cell receptors of appropriate cells, while the immune modulator molecules will interact through their respective ligands or receptors. Although the mechanism of these approaches might be induction or repression of immune responses through humoral and cell-mediated arms of the immune system, other mechanisms may be employed to affect immune modulation that may involve but not be limited to the expression of cellular factors that influence immune responses.

While the invention has been described in connection with specific embodiments thereof, it will be understood that it is capable of further modifications and this application is intended to cover any variations, uses, or adaptations of the invention following, in general, the principles of the invention and including such departures from the present disclosure as come within known or customary practice within the art to which the invention pertains and as may be applied to the essential features herein before set forth.

What is claimed is:

1. A process for treating a cancer patient to induce in said patient an effector cell immune response against the cancerous cells, comprising; administering to a cancer patient tumor-derived biologically generated particles that have been modified to mimic cells capable of presenting antigens to a mammalian immune system in an amount effective to induce an immune response against the cancerous cells, whereby in the cancer patient the immune response would reduce the amount of cancerous cells.
2. The process of claim 1 wherein said effector cells are T cells.
3. The process of claim 1 wherein said tumor-derived biologically generated particles are released from homologous tumor cells derived from the patient.
4. The process of claim 1 wherein said tumor-derived biologically generated particles are released from matched major histocompatibility complex containing tumor cells.
5. The process of claim 1 wherein said tumor-derived biologically generated particles are released from non-homologous tumor cell lines containing one or more matched human leukocyte antigens.
6. The process of claim 1 wherein said particles are generated as virus-like-particles.

7. The process of claim 1 wherein said particles are generated as inactivated intact virus particles.
8. The process of claim 1 wherein said particles mimic dendritic cells.
9. A method for inducing a tumor specific immune response in an animal comprising; administering to the animal a therapeutically effective amount of particles that have been modified to include at least one exogenous antigen fragment bound to a tumor derived surface molecule and also expressing at least one co-stimulatory molecule, said particles inducing a immune response against the tumor.
10. The process of claim 9 wherein said tumor specific immune response is mediated by effector cells of the T, B, and/or dendritic cell lineage.
11. The process of claim 9 wherein said particles are derived from homologous patient tumor cells.
12. The process of claim 9 wherein said particles are from matched major histocompatibility complex containing tumor cells.
13. The process of claim 9 wherein said tumor-derived biologically generated particles are released from non-homologous tumor cell lines containing one or more matched human leukocyte antigens.
14. The process of claim 9 wherein said particles are virus-like-particles.
15. The process of claim 9 wherein said particles are inactivated intact virus particles.